With respect to independent claim 1, the Examiner relies on Audebert for allegedly disclosing, among other things, "a function unit for sending a first authentication number to said authentication information processor"; "a function unit for converting the first authentication number to a second authentication number"; and "using the second authentication number as a new first authentication number." Applicant respectfully disagrees.

The Audebert reference cited by the Examiner with respect to claim 1 fails to disclose, or suggest, at least the recited "authentication numbers" as they relate to the recited "function units". In particular, the Examiner appears to represent that card 2 sends public identification number 5 (hereinafter "ID 5") to unit 3. (Col. 8, lines 30-33). The Examiner appears to assert that Audebert's ID 5 is claim 1's first authentication number ("FAN"). In so doing, the Examiner also appears to consider Audebert's card 2 as claim 1's user information processor, and unit 3 as claim 1's authentication information processor. Applicant submits this is incorrect.

Further, the Examiner represents that secret dynamic encryption key Kn is converted to password A, which is used by unit 3 to authenticate the user. (Col. 8, line 57 - col. 9, line 54). Following this supposition, the Examiner appears to assert that password A is claim 1's second authentication number ("SAN"). However, Applicant submits this is incorrect and that the Examiner has mistakenly relied upon an erroneous description of the actual relationships between ID 5, Kn and password A.

Claim 1 recites a function unit that sends a FAN to the authentication information processor. In addition, another limitation in claim 1 recites that the FAN is converted to the

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SAN by another function unit of the user information processor. In the authentication system of

Audebert, only ID 5 and password A are sent by card 2 to unit 3. (Col. 8, lines 31-39, col. 9,

lines 64-65 and col. 10, lines 11-14). However, even though both variables are communicated

outside card 2, claim 1's FAN is not disclosed or suggested by either ID 5 or password A

because neither variable is converted to any element equivalent to, or even similar to, claim 1's

SAN.

Similarly, claim 1's FAN is not disclosed, or suggested by Audebert's variable Kn. Kn is

an encryption key. As such, Kn is never communicated outside of card 2. This is made clear in

Audebert. When ID 5 is entered into unit 3, certain dynamic variables are produced

"independently of card 2" to calculate a password advisory action for unit 3. (Col. 9, line 64 -

col. 10, line 9). "Independently" means Kn is not passed from card 2 to unit 3. Accordingly, Kn

cannot act as claim 1's FAN.[1]

Since neither ID 5, password A nor Kn satisfy the limitations of claim 1's recited FAN,

Audebert fails to disclose claim 1's FAN and the recited function unit for sending the FAN.

Similarly, since claim 1 also recites that the FAN is converted to the SAN, and none of the

Audebert variables cited by the Examiner could ever act as claim 1's FAN, Audebert does not,

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[1] The Examiner appears to confuse Kn with Kna. Kna, not Kn, is one of the dynamic variables provided
by unit 3. (Col. 10, lines 4-8). All values for Kna are initialized in unit 3's memory 18 for every card
2. (Col. 10, lines 7-9). Accordingly, while Kn and Kna are mathematically related (for the purposes
of encryption and authentication), there is absolutely no disclosure in Audebert to support the
Examiner's implied position that Kn is equivalent to claim 1's FAN. Unit 3 never uses or receives Kn,
and card 2 never sends Kn anywhere. Therefore, Kn, the last Audebert variable cited by the Examiner,
cannot be the missing FAN of claim 1

and cannot, disclose claim 1's SAN or the recited function unit used to, among other things, convert the FAN to the SAN. As such, the Examiner's reliance on Audebert is misplaced. Claim 1 is, therefore, allowable. Further, since claims 2-4 and 9-11 depends from claim 1, these claims are also patentable for the same reasons as set out above with respect to claims 1.

(3)   Claims 5-8 and 12-28

The Examiner relies on Audebert for allegedly disclosing, among other things, a first authentication number ("FAN") and a second authentication number ("SAN"), as recited in independent claims 5, 15 and 19, and a third authentication number ("TAN"), as recited in independent claims 5 and 19. Applicant respectfully disagrees.

None of the Audebert variables cited by the Examiner disclose or suggest the recited FAN, SAN or TAN of independent claims 5, 15 and 19. For example, Audebert's variable Kn is never "sent" or "communicated" outside card 2. Yet, the Examiner asserts that the recited FAN (which is "sent" as recited in each independent claim) is disclosed by Audebert's Kn. (See, Office Action paragraph 7, line 6 and paragraph 17, line 5). For this reason, the Examiner has failed to meet the required burden of proof for rejecting these claims under anticipation. Therefore, the Applicant respectfully submits that independent claims 5, 15 and 19 are patentable. Similarly, since claims 6-8 and 12-14 depend from claim 5; claims 16-18 and 23-25 depend from claim 15; and claims 20-22 and 26-28 depend from claim 19, these claims are also patentable for the same reasons as set out above with respect to claims 5, 15 and 19.

(4)   Conclusion

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

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Respectfully submitted,

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